



Y-12 BULLETIN

A NEWSPAPER BY AND FOR EMPLOYEES OF CARBIDE AND CARBON CHEMICALS CORPORATION IN Y-12

Volume 2, No. 33

5-8017

OAK RIDGE, TENNESSEE

Tuesday, August 17, 1948

City Roadway Improvements Now Under Way

Invitations to contractors to bid on additional roadway and sidewalk improvements in the Oak Ridge Area were issued on August 9, the Atomic Energy Commission announced. Bids will be received until 2 p.m., September 8 and then publicly opened.

Improvements will include construction work on city roads and lanes and concrete entrance sidewalks and steps to 600 semi-permanent dwelling units in the north central entrance sidewalks and steps to 600 semi-permanent dwelling units in the north central section of the city. Hot asphaltic surfacing of portions of the Bethel Valley and Scarboro Roads will also be included in the contract, as well as paving of the sites at which guard structures will be situated at the new controlled area entrances leading from the town of Oak Ridge to the gaseous diffusion plant, the electromagnetic plant and the Oak Ridge National Laboratory. The Rentenbach Engineering Company of Knoxville was recently announced as low bidder for the construction of guard structures at the new entrances.

The new construction is the second stop in a roadway and sidewalk improvement program which is underway on the Area. The contracting firm of Harrison Construction Company is at present working on city roads and lanes bounded by Pennsylvania Avenue on the south, West Outer Drive on the north and New York Avenue on the east. Entrance sidewalks and steps are in the process of construction. Hot asphalt surfacing of Gallaher Road and the Oak Ridge Turnpike has been completed, and the remaining construction is expected to be finished in November.

The new work to be let will consist of approximately two and one-half miles of city roads and lanes and will include earthwork, installation of drainage structures, concrete combined curb and gutter, hot asphaltic base for pavement widening and leveling, and hot asphaltic concrete surfacing.

The following 22 roads and lanes constitute the new construction work on city roadways: Hoyt Lane, East Holston Lane, Howard Lane, Wasbush Lane, Wade Lane, Waddell Place, Waddell Circle, West Price Lane, Pomona Road, Plymouth Circle, Pleasant Road, Pocano Lane, Hunter Circle, Hunter Place, West Pawley Road, West Passmore Road, Oxford Road, Asage Road, Norman Lane, East Newkirk Road, and Nesper Road.

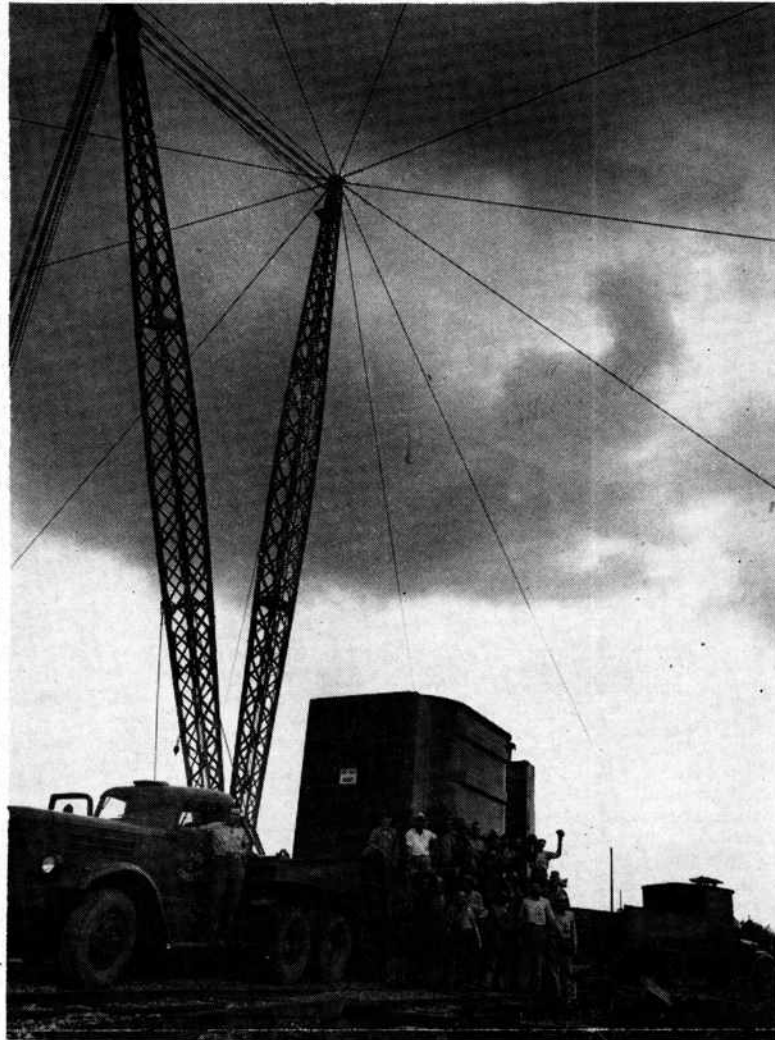
Entrance sidewalks and steps to semi-permanent dwelling units will be constructed on California and Delaware Avenues in addition to the roadways listed. Hot asphaltic sidewalks will be constructed along one side of roads and lanes.

(Continued on Page 3)

Oak Ridge Post Nominates Second District Leader

Miller B. McDonald, past commander of the Oak Ridge American Legion Post, was nominated by the Oak Ridge chapter at their meeting last week for the post of second district commander, and his nomination will be placed before the state convention to be held in Nashville on August 22-24.

C. E. Boone, post commander, extends an invitation to all Legionnaires to visit the newly decorated club room in Legion Hall at Grove Center.



Y-12 Photos By Vince Moore
HERE IS ONE OF THE LARGEST PIECES OF EQUIPMENT listed by the Y-12 Property Department and the largest handled by Y-12 riggers of Dept. A17N. It is a 72-ton electric transformer, shown here as it was placed on a trailer when moved from Midway to Y-12.

Seven Groups Report Perfect Attendance Y-12 Employee Wins Club Print Contest

Seven departments in the Minor League reported perfect attendance for the week ending August 8. However, the plant average for this same period was 2.6 per cent or .2 per cent higher than the preceding week despite the showing of the Minor League departments.

Dept. H12L, Isotope Development, took the lead in the Major League with an absentee report of 0.7 per cent. They were in second place for the preceding week.

Second place in the Major League went to Dept. A12G, Guards, reporting 0.9 per cent and third place was taken by Dept. B12H, Refining with an attendance report of 1.1 per cent.

Seven Departments Perfect

The seven departments in the Minor League reporting perfect attendance are Dept. A12J, Industrial Services; Dept. M13P, Pro-

(Continued on Page 3)

Foster F. Calloway, Dept. H12E, won first and second prize in the Carbide Camera Club's black and white print competition contest on sports. Third prize went to Don Ross, Dept. H12E, and Bruce Stockbridge, Dept. H12E, received honorable mention.

The August 11 meeting was acclaimed as one of the best in recent months and the increased attendance was encouraging, according to Calloway, club president.

The next meeting is scheduled for September 14 at 7:30 p.m., in the club room at the East Portal of Y-12. The program for that meeting will be high-lighted with a film on 16th Century Life in Williamsburg, Va. The film will be furnished by the Eastman Kodak Co.

(Continued on Page 3)

Carbide And Carbon Unit Produces Materials For The New Rolled Plastic Fabric 'Krene'

The history of man's use of fabrics probably began when our ancestors, the cave dwellers, discovered that they could obtain warmth and protection by means of garments of animal skins. Since then one index of man's progress has been the continual development of different kinds of textiles and fabrics to meet human needs, according to the Carbide News, interesting monthly magazine published by Carbide and Carbon Chemicals Corp., South Charleston, W. Va.

"Krene" brand products represent a revolutionary departure in the science of fabrics because "Krene" plastic is rolled, not wov-

en, into existence. These products are made by National Carbon Co., Inc., a unit of Union Carbide and Carbon Corp., at its Bennington, Vt., and Greenville, N.C., plants. Materials from which they are made are produced by Carbide and Carbon Chemicals Corp.

Common Raw Materials Used

To the chemist, the material of which these products are made is a copolymer of vinyl chloride and vinyl acetate suitably plasticized and calendered. Actually the raw materials that are used are natural gas that heats our houses, salt that seasons our food, limestone that lines the banks of the "old swimming hole," and water that quenches

our thirst. The basic raw materials are processed to form two gases which are then combined and changed to a white powder similar in appearance to flour. After a solvent and coloring matter are added to the powder, it is passed through giant heated rollers to emerge as a thin, strong film fabric.

"Krene" plastic fabric is a flexible elastic film thin enough to see through but so tough that it cannot be torn without a deliberate attempt at destruction. It hangs or drapes in soft, wrinkle-free folds. It is completely waterproof,

(Continued on Page 2)

A12S Group Handles Y-12 Operation Of Stores Receiving And Shipping

Dept. A12S, Receiving, Shipping and Stores, has the vast responsibility of handling the huge stockpiles of material and equipment used in Y-12 operations, as well as receiving all inbound shipments and properly dispatching outbound consignments. It maintains and operates four principal warehouses and numerous substores throughout the plant to facilitate its distribution of material and equipment when and where it is needed.

Three Polio Cases Listed In Oak Ridge

Three cases of infantile paralysis have been reported in Oak Ridge, resulting in the first polio death for Oak Ridge, according to Dr. G. F. Moench, director of the Oak Ridge Health Department.

Dr. Moench added that it has not been necessary to close any swimming pools or public gatherings in the area. However, if the disease reaches an epidemic stage then all swimming pools, theaters and public gatherings will be forbidden.

Ruth Jamison gives a daily report of the polio situation in Oak Ridge on her "Food for Thought" program over WATO at 10:30 a.m. In addition to this daily informant program, the public will be notified immediately through news channels if an epidemic breaks.

Dr. Moench advises that these precautions be observed:

1. Stay out of crowds.
2. Don't go where polio cases have been reported or associate with possible carriers.
3. Get plenty of sleep and adequate diet.

Oak Ridge has an average of four polio cases a year. The highest number of cases reported in any one year for Oak Ridge was seven.

Suggestions By Seven Y-12 Employees Are Recognized

Suggestions of twelve Y-12 employees have been recognized as meritorious by the Company and adopted as means of increasing plant efficiency and economy.

The employees and suggestion numbers include S. N. Elmore, Dept. A12G, 62747; A. K. Johnson, Jr., Dept. A14N, 62313; S. B. Ward, Dept. A14N, 26695; M. Huddleston, Dept. B12C, 62515; G. L. Miller, Dept. B12C, 61330; J. B. Creswell, Dept. B12H, 62772; L. C. Hale, Dept. B12H, 61678; Calvin C. Hem-bree, Dept. B12H, 64199; C. L. Riggs, Dept. B12L, 64043; Frances U. Gilliam, Dept. H12D, 64165; Dorothy Mellen, Dept. H12D, 62131; O. M. Garrett, Dept. H12L, 64127.

At the east end of the plant area is Bldg. 9720-6, where all inbound and outbound articles are handled and a vast amount of stores and equipment is stocked. In the matter of inbound shipments about 40 are received daily by truck and rail, ranging from carloads of coal to parcel post packages. Outbound shipments now mostly are composed of excess Y-12 equipment that are being dispatched to other Atomic Energy Commission units.

This massive warehouse closely resembles a large airport hanger and it is stocked neatly from end to end with tiny screws in stock bins to giant transformers. There are 55,000 square feet of floor space on the first floor topped with a balcony having 7,500 square feet of space. The length of this warehouse is 420 feet.

In the matter of items stocked, the Electrical Stores Section in Bldg. 9720-6 tops the rest, with approximately 20,000 different kinds of articles on hand. There are giant transformers, powerful motors, button switches and miles of wire stored in the building ready to be placed in operation.

General Stores is located in Bldg. 9720-2, also in the east end of the area. Materials stored here include hardware, metal stocks, janitorial supplies, valves and many other items. Cement, lumber, general utilities equipment, pipe and similar material are stored in other locations around the area under the jurisdiction of the General Stores section.

All tools used in the Y-12 plant are charged out to the Tool Department along with all clothing, safety shoes being the only exception. In turn the Tool Department issues tools to individuals and when the tools become unservicable they are exchanged. The Tool Department (Continued on Page 3)

Telephone Talks Source Of Leaks

Telephone conversations can be one of our greatest hazards with regard to the safeguarding of classified information. Great care must be exercised by persons having access to classified information to avoid any discussion of such matter over the telephone.

Whenever it appears necessary to discuss information classified Confidential, Secret or Top Secret with local authorized individuals, arrangements may be made via telephone to agree on a time and place to hold a personal conference for the purpose of discussing the information privately. Persons who are unauthorized to receive such information must not be within hearing of the discussion or permitted to inspect or have access to relative classified matter.

In telephone conversations it is permissible to allude to matter in the higher classification categories, provided the conversation does not in itself reveal information classifiable Confidential or higher. Reference to file numbers, dates and subject, provided the reference itself is not classified higher than Restricted, may be made over the telephone, but great care must be exercised not to reveal information graded higher than Restricted.

Y-12 Bulletin

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Strictly Confidential..

Lacy Keele, Dept. B12L, spent his vacation in Dover, Tenn., and ventured up to Kentucky Lake near Gilbertsville, Ky., where he did some boating and swimming . . . Eunice Jones spent a week end as guest of Inez Heatherly in La-Follette . . . Get well wishes are extended to Betty Sherman, who is on the sick list . . . Thelma Cole recently visited her home in Sparta, Tenn. . . . Sympathy is extended to Roger Brotherton, whose uncle died in Greenville, Tenn. . . . Juanita Moore has been visiting with her father, who is critically ill, in Carthage, Miss. . . . Guy Wells and his family were in Daytona Beach last week.

Ed Roselar, Dept. A12W, flew to Buffalo, N. Y., recently and moved his family to Oak Ridge . . . C. A. Johnson also moved his family to Oak Ridge from Boston . . . J. C. Little decided to spend his vacation this year at Daytona Beach, just taking life easy . . . G. J. Angele's mother of Baltimore, Ind., is visiting with him . . . Bob Morris is back on the job after a vacation in Atlanta, Ga.

J. P. Snodgrass has returned to work after a vacation, visiting points of interest in East Tennessee, including the Smokies, Chattanooga and Norris Dam. He also took a jaunt to Cumberland Gap, Tenn. . . . H. F. Eubank is spending his vacation on his farm near Byington, Tenn. Before leaving, Eubank remarked that he intended to spend most of his time in the watermelon patch . . . Edith Landrum is vacationing in Kingsport. R. H. Ford, Dept. M13P, and his wife were in Clanton, Ala., last week on vacation.

E. Zurcher, Dept. A13W, spent his vacation taking life easy at his home in Knoxville . . . F. S. McGuinness is visiting friends and relatives in Pennsylvania.

Frank DiCarlo, Dept. B12C, is currently enjoying his vacation in Oak Ridge and intends to take some side trips to points of interest in East Tenn. . . . Grace Sluder was in Greenville last week visiting with friends and relatives.

Bill Davis, Dept. A23J, motored to Barbourville, Ky., over the week end, leaving his wife and children to enjoy a vacation, while Bill returned to Oak Ridge.

Employees vacationing in Dept. A12G are B. H. McCord, E. M. Hunnicutt, D. A. Cowan, M. S. Sutton, H. J. Ballew . . . Capt. J. H. Conner is on a sightseeing tour to New York City and Canada.

Harvey Keese, Dept. B12H, is spending his vacation in Oak Ridge. Since Keese is a big golfer, we expect to see quite a bit of him around the Oak Ridge Golf and Country Club . . . Elizabeth and Clarence Harris, better known as Lizz and Fuzz, are in Tellico Plains vacationing . . . J. W. Mitchell is spending his vacation out west visiting with friends and relatives in Tulsa, Okla. and Denver, Colo.

Dovie Searcy, Dept. M12P, is spending a quiet vacation in Oak Ridge . . . Ethel White spent her vacation in Oliver Springs . . . F. B. Tilson and his family visited with relatives and friends in Johnson City, Tenn.

Wm. J. Wilcox Jr., Dept. H12D, and his wife, Eugenie, Dept. B12A, are vacationing in Lexington, Va. . . . Department H12D has the welcome mat out for Marilyn Jeffers and Jeanne Rogers . . . Sympathy is extended to H. P. House, whose mother-in-law died in Lowell, Ind., last week. F. L. Daley is vacationing in New York City . . . Get well wishes are extended to Herbert Clinton, who is ill.

B. I. Scott, Dept. A14N, spent a recent vacation in Georgia . . . Get well wishes are extended to I. H. Hall, who is on the sick list . . . I. D. Wallace spent a recent vacation in Oak Ridge . . . W. S. Arnold spent his vacation in Washington, D. C. J. C. Ezelle and Evan Means turned up at Laurel Lake on the same day by chance and both return with the report that each caught a 10-inch blue gill, which are the largest reported this season.

Bill Rathkamp, Dept. H12L, is reported as one of the outstanding shooters of The Oak Ridge Rifle Team of the Oak Ridge Sportsmen's Club.

Mrs. Leona Hunter and her daughter, Carmen Cecile of Deridder, La., are visiting with Mrs. Hunter's brother, Paul Ward of Housing in Dept. A12J.

Mr. and Mrs. J. E. Henderson, of Fort Worth, Texas, have been visiting their son, G. C. Henderson, of Dept. A13J, and his wife.

The Y-12 Bulletin Editors have been enjoying the Florida sunshine . . . Robert A. Burgin, Jr., flew to Miami Beach, Fla., over a recent week end . . . George W. Dobbs has just returned from a two-week vacation spent basking in the sun at Daytona Beach, Fla.



Y-12 Photos By Vince Moore
PICTURED AT A SHOWER GIVEN IN THE HONOR OF Mrs. Opal Blackwell, the former Opal Froedge, by June Wilkerson, Billie Boyd and Mary Lee Radin, on the front row, from left to right, are Garnet Adams, Alice Jamison, Earline Banic and Ann Bennett. On the Back Row, from left to right, are Mrs. Jess Boyd, Davis Holliday, Jo Solomon, Juanita Fox, Mary Radin, Opal Blackwell, Billie Boyd, June Wilkerson, Evelyn Frazier, Inez Heatherly, Dotty Skinner, Eunice Jones and Naomi Sexton.

Carbide Unit Produces Materials For New 'Krene'

(Continued from Page 1)
and impervious to household stains! It does not mildew, crack, peel, or rot.

Seams Joined Without Sewing

Equal in importance to the characteristics of the fabric is a process developed by National Carbon Co. called "heat-sealing" or "welding." This permits it to be joined, without sewing, in almost invisible seams stronger than the fabric itself.

Research on welding plastics was speeded up during the war to find out in a year what it might have taken five years to learn. Heat-sealing was used in the manufacture of war products so that they would withstand the most rugged use. They included: "desalination" bags (which with the help of a chemical pill, changed sea water into drinking water), gun covers, tarpaulins, powder bags, map cases, water bottles, head-wound gas masks, arm and leg bandages.

Many Products From Fabric

In the postwar world, too, this plastic fabric is made into those products in which its particular properties play an essential part. These products include shower curtains, cottage, dinette and kitchen window curtains, aprons, table cloths, garment bags, and plastic yard goods.

A "Krene" plastic shower curtain has an almost invisible weld-

Hospital List

The following Y-12 employees were patients in the Oak Ridge Hospital last week: Benjamin Beckham, Dept. A14N; Sylvester J. Nuelle, Dept. B12H; Herbert Clinton, Dept. H12D; Betty J. Sherman, Dept. B12L; Dorothy Brashears, Dept. M12P; Herman P. Kackemester, Dept. H12D; Doris Carolyn Kirk, Dept. A12S; Percy C. Larue, Dept. A16N.

Deliveries

Two births were reported to Y-12 families at the Oak Ridge Hospital last week. Parents were Mr. and Mrs. Robert S. Lowrie, a son, August 5; Mr. and Mrs. Ralph M. DeLozier, a son, August 6.

ed seam and a welded, tear-proof heading. These shower curtains gained style and individuality by means of plastic printing. The almost invisible seam makes over-all silk screen printing possible, so that the entire curtain can be printed at once.

"Krene" Products Easily Cleaned

"Krene" products are economically and easily cleaned — an important feature to home makers. Plastic dinette curtains and kitchen window curtains made of this material do not absorb kitchen smoke, and are not made limp by kitchen steam. They can be washed quickly with a damp cloth and returned to their windows in ten minutes.



TROY HIGHTOWER AND his wife, the former Ruby Dunsmore, are pictured above after their wedding on July 31.

Carbide Wives Set Meeting August 18

The Carbide Wives Club will meet tomorrow in the East Lounge of the Ridge Recreation Hall at 7:30 p.m.

Hostesses are Mrs. E. J. Spitzer, chairman, Mrs. H. M. Burnett, Mrs. Paul Griffin, Mr. R. A. Koteski and Mrs. E. B. Olszewski.

The club will play bridge rummy and refreshments will be served.

One of the chief causes of traffic accidents is following the car ahead too closely, the National Safety Council says. The rule of one car length for every 10 miles of speed is good except when streets are wet or icy.



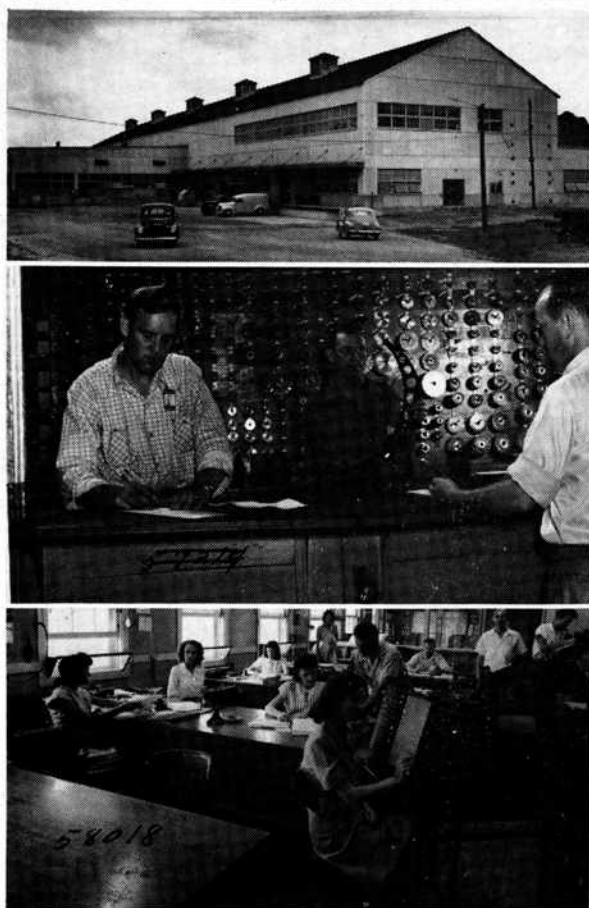
USES OF "KRENE" PLASTIC FABRIC are shown in the above pictures. At left is a shower curtain with



a silk-screen print ~~scenery~~ in two colors. A waterproof apron to wear around babies or batter is shown in



the center picture while at the right is a view of a kitchen in which curtains, table cloth, and chair pads all are made of "Krene."



Y-12 Photos By Vince Moore

WAREHOUSE BLDG. 9720-6, LOCATED AT THE EAST END OF THE PLANT AREA, may be compared as to size with the trucks at the loading platform in picture No. 1. Picture No. 2 shows J. V. Talley in the Tool Department filling out the necessary forms to issue George Ferrell, Dept. A16N, a part as T. D. Doyle hands the part to Ferrell. The staff of the busy Property Office, shown at work in picture No. 3 include Clyde Ferrell, Frances Smith, Jeannie Halsey, Betty Green, Bill Bonham, Lou Carter, Olyne Poindexter, C. L. Bratcher, W. B. Plemens and Jim Bowers, supervisor. Doyle Karaker is unpacking glassware, used in the chemical laboratories, in picture No. 4. C. M. Miller is operating the lift in picture No. 5 as W. J. Stolp, Sr., checks the storage list.

Department A12S Handles Receiving And Shipping

(Continued from Page 1)
ment occupies part of the General Stores Warehouse Building.
J. W. Garland is supervisor of the Receiving and Shipping section and Tool Dept. and W. L. McNabb is General Stores Warehouse supervisor.

For the convenience of the Chemical, Refining and Electrical Divisions, other storerooms are provided to stock the highly specialized material and equipment used by these divisions. Supervisors of these sections include B. B. Thornton, Chemical; R. E. Austin, Refining; and J. D. McGuffin, Electrical.
Down in Bldg. 9720-5, near the west end of the plant area, is located the Chemical Stores section. Its spacious floors are stacked with more than 9,000 different varieties of articles that include many queer looking pieces of laboratory equipment and cartons and packages of chemical material used in the Chemical Division operations.

Approximately 4,000 different items are carried in the Refining Stores quarters in Bldg. 9204-3 and in Warehouse 9720-1.

The Chemical, Refining and Electrical Stores and Tool Department main warehouses are supplemented with additional substations conveniently located in the plant area, where material is issued to the using departments and tools loaned to the individuals.

From each of the different warehouses the supplies and equipment is issued on requisition to the various departments and promptly sent out where required. Record keeping indicates the using departments and usage of all issued materials. In addition to the main warehouse, there are 21 other storage buildings strategically located to serve various plant departments.
There are 117 employees in the Receiving, Shipment Stores and Tool Department. The varied functions of the department requires workers of many skills and abilities.

Also a part of the Manufacturing Offices Division, is the Property Department, whose responsibility it is to establish and maintain the property records for the Y-12 area, safeguarding the Company's interest in the use of government property.

The records are divided into two classifications known as "A" and "B" Property. "A" Property consists of all land, buildings,

roads, utility and traffic systems. "B" Property involves all the non-expendable item such as office equipment, vehicles, laboratory equipment, pumps, etc.

Up to date more than 70,000 items have been inventoried, tagged with an identification number and listed on the property records.

Four basic types of records are maintained and all are cross referenced to each other. They include an alphabetical file, listing equipment by name, size, model and the quantity of each; a location file, listing each item in numerical sequence by the property number; a serial file, which is an alphabetical card file of equipment filed in the sequence of the serial number and the fourth file is the departmental, listing all equipment by the department and building location.

Before any records could be established it was necessary that field inventory crews accurately describe each item of "B" Property on their inventory and attach property regardless of its location. This project was under the supervision of L. V. Thornton.

The inventory and establishment of the "A" Property records has just begun and it is under the supervision of Bill Bonham.

In addition to the normal record keeping the department often is called upon by other departments to assist in locating certain items of equipment needed in the performance of their work and also to make special reports or inventories for the Atomic Energy Commission and management as requested.

Roadway Improvements Now In Progress In OR

(Continued From Page 1)

Approximately 1.8 miles of area roads will be surfaced with hot asphalted concrete. The Bethel Valley Road will be surfaced from Solway Entrance to the intersection of Scarboro Road. Construction on the Scarboro Road will be undertaken between the Bear Creek Road and the new entrance leading to the electromagnetic plant.

When the contract is let some time after September 8, a total of 270 calendar days will be allowed for completion of the work. The paving at the gate sites, however, will be completed about January 1 in preparation for the opening of Oak Ridge to the public at around that time.

Additions To Y-12 Technical Library

SOCIAL SCIENCE

HA 33—Kelley, Truman Lee, "Fundamentals of Statistics." Cambridge, Harvard University Press, 1947. 755 pages.

HD 6961—Cooper, Alfred M., "Supervision of Governmental Employees." First edition. N. Y., McGraw-Hill, 1943. 202 pages.

HD 7261—Resnick, Louis "Eye Hazards In Industry." N. Y., Columbia University Press, 1941. 321 pages.

HD 7262—Judson and Brown, "Occupational Accident Prevention." N. Y., Wiley and Sons, 1944. 234 pages.

HD 7273—Faist and Newkirk, "Job Safety Training Manual." N. Y., National Foremen's Institute, 1945. 52 pages.

HD 7273—Heinrich, H. W., "Industrial Accident Prevention; a Scientific Approach." Second edition. N. Y., McGraw-Hill, 1941. 448 pages.

HD 7273—Schaefer, Vernon G., "Safety Supervision." N. Y., McGraw-Hill, 1941. 352 pages.

HD 7277—Armstrong, Blake, etc., "Industrial Safety." N. Y., Prentice-Hall, 1943. 435 pages.

HD 7277—Lippert, Frederick, "Accident Prevention Administration." N. Y., McGraw-Hill, 1947. 159 pages.

SCIENCE

Q 219 Ref.—Muller, V. K., "Russian - English Dictionary." N. Y., Dutton, 1947. 822 pages.

Q 219 Fef.—Muller, V. K., "English - Russian Dictionary." N. Y., Dutton, 1944. 776 pages.

Periodical—"Research," beginning with October, 1947 issue.

MATHEMATICS

QA 48—National Bureau of Standards, "Tables of Spherical Bessel Functions." Vol. I. N. Y., Columbia University Press, 1947. 375 pages.

QA 48—National Bureau of Standards, "Tables of Spherical Bessel Functions." Vol. II. N. Y., Columbia University Press, 1947. 328 pages.

QA 331—Hans, Hohn, "Set Functions." New Mexico Press, 1948. 324 pages.

QA 341—Bliss, Gilbert Ames, "Algebraic Functions." N. Y., Amer. Math. Society, 1933. 219 pages.

QA 345—Coble, Arthur B., "Algebraic Geometry and Theta Functions." N. Y., Amer. Math. Society, 1929. 282 pages.

QA 372—Ritt, Joseph Fels, "Dif-

Ridge Chest Agency Offers Home Assistance For Family

Assistance to Oak Ridge families who find themselves in financial difficulties or in cases of emergency where aid in the home can help solve perplexing domestic problems frequently is offered through the Family Service Bureau. The Family Service Bureau is one of the Red Feather Agencies of the Oak Ridge Community Chest.

Seven Departments Report Perfect Plant Attendance

(Continued From Page 1)

duct Processing; Dept. A15N, Experimental Process Equipment and Maintenance; Dept. M12S, Steam Plant; Dept. A19N, Laundry; Dept. B12A, Superintendent's; and Dept. A12L, Employment.

Second and third places were taken by Dept. A12D, Dispensary and Dept. A12T, Automotive Repair, with reports of 1.1 per cent and 1.3 per cent respectively.

The complete record of Y-12 absenteeism for the week ending August 8 by departments follows:

MAJOR LEAGUE				
Dept.	Percentage Absent	Standing	8-8-48	8-1-48
H12L	0.7	1	2	
A12G	0.9	2	4	
B12H	1.1	3	5	
B12C	1.79	4	11	
A12S	1.82	5	9	
H12E	2.28	6	1	
B13L	2.34	7	12	
M12P	2.4	8	8	
B12L	2.6	9	6	
A14N	2.8	10	7	
A17N	2.95	11	10	
A13N	3.01	12	3	
A16N	4.9	13	13	
A12M	6.5	14	14	
H12D	7.2	15	15	

Group absentee percentage was 2.7 per cent, .4 per cent higher than the preceding week.

MINOR LEAGUE				
Dept.	Percentage Absent	Standing	8-8-48	8-1-48
A12J	0.0	1	8	
M13P	0.0	1	1	
A15N	0.0	1	2	
M12S	0.0	1	3	
A19N	0.0	1	5	
B12A	0.0	1	6	
A12L	0.0	1	12	
A12D	1.1	2	15	
A12T	1.3	3	1	
A13W	1.6	4	16	
A13T	2.3	5	9	
B13C	2.35	6	17	
A14J	2.40	7	7	
A12W	3.0	8	4	
A12A	4.7	9	11	
A12R	5.2	10	13	
A13S	5.6	11	1	
A12P	6.7	12	10	
A12N	10.9	13	14	

Group absentee percentage was 2.5 per cent, remaining the same as the preceding week.

The plant average for the week ending August 8, 1948, was 2.6 per cent .2 per cent higher than the preceding week.

MOONLIGHT CRUISE PLANNED

A moonlight cruise on the "Lake Queen" on Fort Loudoun Lake is planned for Oak Ridge Junior Chamber of Commerce and the Oak Ridge Jayettes on August 20. A motorcade will leave the Jaycee club house at 7 p. m.

ferential Equations from the Algebraic Standpoint." N. Y., Amer. Math. Society, 1932. 173 pages.

QA 374—Webster, A. G., "Partial Differential Equations of Mathematical Physics." N. Y., Hafner, 1947. 440 pages.

QA 649—Kasner, Edward, "Differential-Geometric Aspects of Dynamics." N. Y., Amer. Math. Society, 1913. 117 pages.

Periodical—"American Mathematical Society, Bulletin," beginning with June, 1948 issue.

PHYSICS

QC 21—Kohlrausch, F., "Praktische Physik." Vol. I. N. Y., Rosenberg, 1947. 535 pages.

QC 21—Kohlrausch, F., "Praktische Physik." Vol. II. N. Y., Rosenberg, 1947. 578 pages.

CHEMISTRY

QD 4 Ref.—Jacobson, C. A., "Encyclopedia of Chemical Reactions." Vol. II. N. Y., Reinhold, 1948. 917 pages.

QD 258—Hickinbottom, W. J., "Reactions of Organic Compounds." N. Y., Longmans, 1948. 481 pages.

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Aid Of Homemaker Sought

A typical case where assistance was given by the Family Service Bureau is that of Mrs. J. Convallescing from pneumonia, Mrs. J. requested a homemaker from the Family Service Bureau to care for her and the three children, David Jr., 7, Johnny, 3 and Lydia, five months, and to assume the normal household responsibilities. However, the mother said that the family could not afford to pay the agency the full amount of the homemaker's wages.

Mrs. J. was informed that financial arrangements to suit the means of the family could be made. The caseworker explained that planning for the homemaker placement includes a personal interview to discuss with the applicant the terms of placement and duties of the homemaker, enabling the former to understand what responsibilities the homemaker can be expected to assume and what duties the homemaker can anticipate during the time of placement. Mrs. J. agreed to ask her husband to visit the office for this purpose and to discuss at the same time the budget of the family.

Agreement On Fee Reached

The father visited the office and learned about the procedure of placement and duties usually performed by a homemaker. He explained what the family would want the homemaker to do and what was involved in the household routine. In the discussion regarding the fee of the homemaker, Mr. J. said quite frankly that he could pay part of the fee. The bureau reviewed the income and expenses of the family and together arrived at a fee that Mr. J. thought would be reasonably possible for him to pay.

The length of placement was two weeks, the maximum amount of time a homemaker is made available without considering an extension. During the placement contacts were maintained with the family. A visit to the home by the case worker revealed that Mrs. J. was able to recuperate without having to endure any mental strain as a result of worry about the care of the children or household. Both parents were of the opinion that the homemaker service was most valuable. The presence of the homemaker relieved Mrs. J. of the pressures of family responsibility during her convalescence and at the same time avoided the need to separate members of the family while the mother was recovering.



THE PICTURE ABOVE was judged the winning print in the Carbine Camera Club contest held last week. The print was made by Foster Calloway and the two boys are Leo Thometz, Jr. and Billie Frey, reading from left to right.

Camera Club Announces Print Contest Winners

(Continued From Page 1)

Following the film, a black and white print competition will be held on landscapes and scenic subjects. Entries for the contest must be in by September 7.

The prints may be left at the home of Virgil Haynes, 114 East Holston Lane or at Taylor's Photo Shop.

A good listener is not only popular—after a while he learns something.

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Y-12 Plant League Games Tighten As Tournament Approaches With Three Clubs Struggling For Lead

The plant league tournament gets under way Thursday night, winding up the 1948 season. The Fire Department, Guards and Bird Cagers remain as heavy favorites and the clubs to be beaten. Other teams that shouldn't be overlooked that are in position to upset the favorites include the Calutrons, Isotopes and Maintenance.

The tournament is expected to be one of the closest in plant league history, with all of the outfits out to win the 1948 plant championship.

The last week of play in the plant league games was the closest yet, indicating the tough road ahead for the tournament.

The Firemen almost lost their league lead on August 10 when they edged Maintenance 2 to 1 in one of the closest plant league games of the season. Johnny Webb hurled the Fire Department to their victory, giving up only four hits. E. Green chalked up the same record for the losers. Krause, Roberts, Braden and Argo each collected a single for the Fire Department. L. C. Martin netted two singles for Maintenance and his teammates, Green and Kimbro, got a single apiece.

Bums Take One-91

The Bums knocked the Carbon League-leading One-91ers for a 9 to 6 loss on August 10. Walton relieved Francis as hurler for the Bums in the fifth inning. The winning pitcher was also slugging from behind the plate, with a double, triple and a single. Brown was the heavy hitter for the Bums, with a single, double and a homer. Stukenbroeker tossed for the losers.

Dreamers Win
The Dreamers notched up a win last Tuesday night over the Crew Chiefs with a 15 to 11 tally. Redden pitched for the Dreamers, whiffing seven and walking six. Bill Walker caught. The Crew Chiefs' battery was composed of Parsons and Mitchell. Parsons fanned nine and walked five. Walker got four hits out of five trips to the plate.

Six C's Top One-91

The Crew Chiefs had previously topped One-91 earlier in the week, giving the losers their first loss of the second half. Walter Simmons hurled for the Six C's in their 8 to 2 win over One-91ers. Stukenbroeker started the game on the mound for One-91 and he was relieved by Smitty. Adcock collected three singles out of four trips for the Crew Chiefs.

Firemen Lead Guards

The game between the Fire Department and the Guards was called by the ump on time at the end of the sixth, with the Firemen leading 3 to 1. Johnny Webb hurled for the leaders and "Lefty" Christopher tossed for the Guards.

Both pitchers allowed only four hits in the six-inning game. Webb, Davis, Moore and Krause batted a single apiece for the Firemen. The hits for the Guards were collected by Scott, Holt, Shoemaker and McAllister.

Guards Edge All-Stars

Later in the week the Guards eased by the All-Stars 3 to 1, with Christopher on the mound again, fanning 11 of the All-Stars. Sparks and Shoemaker connected on the losing hurler, Grimes, for homers.

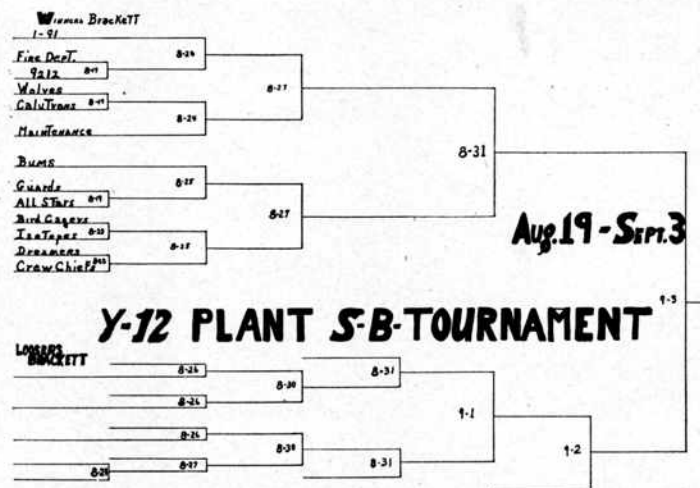
Wolves Howl
The Wolves skipped by Bldg. 9212 on August 6, led by J. Roberts on the mound, winning 12 to 8. Ford started the mound duties for Bldg. 9212 and was relieved by Mustin in the sixth. Zeigler was the big batter for the night, with three singles in four trips.

ICKES TO SELL STAMPS

Nearly 100,000 stamps from the collection of former Secretary of Interior, Harold Ickes, will go on sale this fall. The collection represents Ickes' 30-year hobby of collecting stamps from all parts of the world.

NEW HOURS FOR RIDGE POOL

The Oak Ridge swimming pool began a new schedule last Saturday, as announced by the Recreation Department. The pool will be open from 1 p. m. to 8 p. m. daily.



THE Y-12 PLANT SOFTBALL TOURNAMENT BRACKET is shown above listing the scheduled games and dates to be played.

Cards Meet R-A, ORNL; Robusters Idle

The Y-12 varsity baseballers have two games on slate this week, engaging Roane-Anderson Thursday and Oak Ridge National Laboratory on Saturday. Both games will be played at Oakwood Park, starting at 8 p. m.

The Varsity Softball team was idle last week and are scheduled to meet Firestone on August 23.

Community Stores Win

The Community Stores baseball club barely edged the Y-12 Cardinals 7 to 6 on August 8 at Oakwood Park. The Y-12 Varsity outfit rallied in the eighth inning when they were trailing 6 to 3 and brought in three runs, tying up the ball game.

The Stores came back the next inning and scored the winning run. Lusk hurled for the Stores, fanning six of the Cardinals and walking two.

Kappelman started on the mound for Y-12 and he was relieved by Gardner in the seventh. Dodson caught for Y-12. Noe was the Cards' big hitter, with four singles out of four trips to the plate.

The Cardinals' scheduled game with the K-25 Hubs was rained out last Thursday night. They were slated to engage the AECers last night.

Two Y-12 Clubs Win First Games In "B" Tournament

Two Y-12 teams entered in the Oak Ridge City "B" Tournament emerged victorious in the first two nights of play. The Y-12 Has Beens topped the X-10 Instrument outfit 9 to 2. Johnny Webb hurled for the Y-12ers and Emette Moore caught. Brown tossed for the losers and Hurst caught.

Bird Cagers Win

The second Y-12 team winning their first game was the Bird Cagers over Trinity Methodist Church, 7 to 2. Ed Sise was the winning pitcher, opposed on the mound by Hudson.

Johnny Webb had a no-hit, shut-out game up until the last of the seventh, with two away when the Instrument outfit chalked up two hits and later scored two runs.

The Has Beens also won their second tournament game by beating the X-10 Microswats 12 to 3 with Johnny Webb again doing the hurling.

Then Came The Rude Awakening

According to a recent news dispatch from Windsor, Ont., a policeman was on his nightly beat, flicking his flashlight beam through a cigar store window, when he thought he saw a man in the store. The man, at the same time, quietly darted into a telephone booth causing the little light to go on. The policeman's suspicions were confirmed.

K-25 Drops League; Robins Remain Intact

The Women's Municipal Softball League was discontinued without approval of the League officials and the schedule has been declared incomplete by the officials. No one team can be declared champion of the league without completion of the scheduled games.

The Y-12 Robins and Roane-Anderson were the only remaining teams in the Women's softball league when the K-25 lassies dropped out by failing to show up in a scheduled game between the Robins and the West Turnpike girls. The Robins were definitely on the upgrade and appeared as a likely winner of the league when K-25 dropped out.

Showing some of their last half strength the Robins came from behind in the second inning on August 6 when Roane-Anderson was leading the locals 10 to 1, to hold the R-A girls at 10 runs and tally 16 themselves to win 17 to 10.

In the August 6 contest Marian Brown started the pitching for Y-12 and she was relieved by Helen Brown in the second. Ann Hart in turn relieved Helen Brown as catcher.

Jerry Morrisette was the slugger for the Robins with four singles and a walk in five trips to the plate. Helen Aikman and Pat Roberts alternated each inning as hurlers and at third base.

Y-12 Shoe Hurlers Win Over Oak Ridge Jaycees

Y-12's No. 2 horseshoe team wallowed the Oak Ridge Junior Chamber of Commerce club 13 to 3 last Thursday night at Ridge Courts. Another match is scheduled for the Y-12ers and the Jaycees tomorrow night at Ridge Courts.

The Jaycees forfeited their scheduled game with the No. 1 team last Wednesday night.

Back to the No. 2 game played Thursday night, the results gave Fields and Gragg three wins and no defeats for Y-12 while Watts won one with no losses. Olson and Beckett won one and lost one for the Y-12ers and Forbs failed to break into the win column with one defeat.

Y-12 Tournament Players Warned Of Carelessness

The Y-12 plant softball tournament begins Thursday and the Y-12 Recreation Department warns against useless injuries. Several injuries have been reported from various plant league games during the past three weeks and due care should be taken during the tournament to avoid all accidents.

The tournament will decide the plant league champion and end a successful season of softball for Y-12. The games are for entertainment and recreation purposes only and chances should not be taken that might result in a minor or even serious injury.



Y-12 Photos By Vince Moore

ONE-91 IN THE CARBON LEAGUE OF THE PLANT SOFTBALL loop are shown above standing from left to right Joel Thomas, George Stukenbroeker, Hugh Finley, Bill McByrd, R. D. Smitty and Bill Schultz. Pictured kneeling from left to right are Herb Quinn, Neil Goodin, Chester Futtz, Jim Redmond and Jim Parham.

Plant Softball Schedule, Standings, Results

CARBIDE LEAGUE									
TEAM						R	H	E	
Guards	0	0	0	1	1	1	0	3	6
All Stars	0	0	0	0	0	1	1	5	2
Fire Dept.	0	0	3	0	0	0	3	4	1
Guards	1	0	0	0	0	0	1	4	3
Wolves	3	0	0	3	4	0	2	12	15
Bldg. 9212	1	3	1	0	0	0	3	8	8
Fire Dept.	1	0	0	0	0	1	2	4	4
Maintenance	0	0	0	1	0	0	0	1	4
Bird Cagers	0	1	0	0	2	1	4	8	6
Calutrons	0	1	2	0	0	0	0	3	4
Bldg. 9212	3	0	0	0	3	2	x	8	12
All Stars	0	0	2	0	1	0	1	4	6

CARBON LEAGUE									
TEAM						R	H	E	
Crew Chiefs	2	1	0	1	4	0	x	8	8
One-91	0	1	0	0	1	0	0	2	3
Bums	0	2	3	2	0	0	2	9	15
One-91	0	0	0	1	3	0	2	6	5
Dreamers	3	0	0	4	2	4	2	15	14
Crew Chiefs	2	0	0	5	2	0	2	11	4
Bums	3	0	2	2	7	4	x	18	13
Dreamers	0	0	0	0	1	0	0	1	3

STANDINGS AUGUST 12					
Carbide League					
Team	W	L	Team	W	L
Fire Dept.	7	0	Wolves	3	5
Guards	6	1	Bldg. 9212	2	5
Isotopes	5	2	Calutrons	1	7
Maintenance	5	3	All Stars	0	7
Bird Cagers	4	3			

Carbon League					
Team	W	L	Team	W	L
One-91	6	2	Crew Chiefs	2	5
Bums	6	2			



Y-12 Photos By Vince Moore

THE MANUFACTURING OFFICE DIVISION'S FIRST AID team and their alternate member entered in the Oak Ridge First Aid Contest are pictured above demonstrating the correct method of caring for a patient, in a practice session, who has received an electrical shock from a power line and received burns on his right arm and left leg. The patient was also knocked unconscious. The team shown from left to right are J. C. Duguay, A. V. Bible, A. K. Self, Joe McMasters, alternate, Leon Brown and B. N. Strunk. The patient is L. V. Thornton, substituting for W. B. Plemens.